(11) **EP 2 762 004 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 15.10.2014 Bulletin 2014/42

(43) Date of publication A2: 06.08.2014 Bulletin 2014/32

(21) Application number: 13168946.5

(22) Date of filing: 23.05.2013

(51) Int Cl.:

A21C 1/02 (2006.01)

B01F 7/16 (2006.01)

A47J 43/07 (2006.01)

A21C 1/14 (2006.01) A47J 43/046 (2006.01) A47J 43/08 (2006.01)

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR Designated Extension States:

BA ME

(30) Priority: 05.02.2013 CN 201320065741 U

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(54) A food kneading appliance

(57)A food kneading appliance especially adapted to mix and knead bread or pizza dough or dough of other types includes a container 3, a central body 1 located in the center of the container, kneading tools 2, and a drive unit to rotate the central body. The central body includes a stirring spindle 11 and a kneading spindle 12 which are positioned in the same axis and rotate in opposite directions in operation. The kneading tools include a dough hook 21 disposed on the stirring spindle 11 and a dough mixer 23 disposed on the kneading spindle 12. The appliance can provide large torque and low speed operation so that the dough can be processed without overheating and Deteriorating. Beyond that, the dough is easy to be thoroughly mixed and achieve high quality dough that is comparable to manual kneading. Another advantage of the invention is that the kneading process is stable and low in noise.

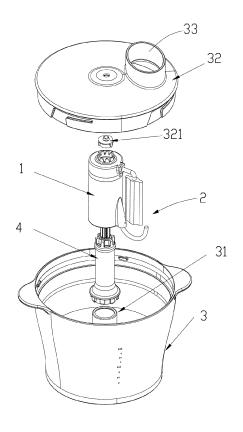


FIG.1

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EUROPEAN SEARCH REPORT

Application Number

EP 13 16 8946

Category	Citation of document with ir of relevant passa	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
X Y	US 1 692 022 A (SAM 20 November 1928 (1 * figures 1-3 * * page 1, line 1 - * page 1, line 30 -	line 3 *	1,2 3-6	INV. A21C1/02 A21C1/14 B01F7/16 A47J43/046 A47J43/07 A47J43/08	
X Y	US 3 054 565 A (PET 18 September 1962 (* figures 1,2 * * column 2, line 6	ER WILLEMS) 1962-09-18) - column 3, line 15 *	1,2 3,5		
X Y	US 3 176 968 A (APP 6 April 1965 (1965- * figures 1-12 * * column 4, line 64		1,2 3-6		
X Y	EP 0 354 888 A1 (N0 [SE]) 14 February 1 * figures 1-3 * * abstract *		1,2		
Υ	DE 53 824 C (C. MAR 4 October 1890 (189 * figures 1,2 * * page 1 *		3-6	TECHNICAL FIELDS SEARCHED (IPC) A21C B01F A47J	
Υ	FR 421 255 A (HORAC 18 February 1911 (1 * figure 1 * * page 1, line 1 -	911-02-18)	3-6		
Υ	WO 98/38085 A1 (NIE [FI]) 3 September 1 * figures 1-3 * * page 3, line 22 -		3-6		
	The present search report has I	·			
	Place of search	Date of completion of the search	12	Examiner	
	The Hague	23 May 2014	Kr	asenbrink, B	
X : part Y : part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another of the same category inological background written disclosure	L : document cited	ocument, but pub ate I in the application for other reasons	lished on, or	



EUROPEAN SEARCH REPORT

Application Number EP 13 16 8946

	DOCUMENTS CONSIDER	ED TO BE RELEVANT	_	
Category	Citation of document with indica of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Υ	US 1 555 043 A (ALFRE 29 September 1925 (19 * figures 1,2 * * page 1, line 28 - l	25-09-29)	3-6	
A	SU 1 180 056 A1 (LE T 23 September 1985 (19 * figure 1 * * abstract *	I IM LENSOVETA [SU]) 85-09-23)	1-6	TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has been	·	_	
	Place of search The Hague	Date of completion of the search	Vna	Examiner senbrink, B
X : part Y : part docu A : tech O : non	The Hague ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another iment of the same category nological background written disclosure mediate document	T: theory or principle E: earlier patent document D: document cited in L: document cited for E: member of the sc	e underlying the in cument, but publis e n the application or other reasons	nvention shed on, or



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	CLAIMS INCURRING FEES
10	The present European patent application comprised at the time of filling claims for which payment was due.
	Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
15	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.
20	
	LACK OF UNITY OF INVENTION
	The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
25	
	see sheet B
30	
	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
35	As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
	Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
40	
45	None of the further search fees have been paid within the fixed time limit. The present European search
	None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: 1-6
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	The present supplementary European search report has been drawn up for those parts
55	of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



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LACK OF UNITY OF INVENTION SHEET B

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely: 10 1. claims: 1-6 food kneading appliance comprising a driving bevel gear located on the upper inner side of the stirring spindle and an upper kneading spindle having a following bevel gear located inside of a lower portion and a lower kneading 15 spindle provided with several gear brackets and several planet bevel gears 2. claims: 7, 8 20 food kneading appliance comprising specific dough hook forms and specific dough mixer forms 25 30 35 40 45 50

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-05-2014

1	0	

	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	US 1692022 A	20-11-1928	NONE	
15	US 3054565 A	18-09-1962	NONE	
	US 3176968 A	06-04-1965	NONE	
20	EP 0354888 A1	14-02-1990	EP 0354888 A1 SE 8802879 A	14-02-1990 13-02-1990
20	DE 53824 C	04-10-1890	NONE	
25	FR 421255 A WO 9838085 A1	18-02-1911 03-09-1998	AT 229904 T AU 6101498 A DE 69810276 D1 DE 69810276 T2 EP 0963315 A1 FI 974256 A WO 9838085 A1	15-01-2003 18-09-1998 30-01-2003 22-04-2004 15-12-1999 26-08-1998 03-09-1998
30	US 1555043 A	29-09-1925	NONE	
	SU 1180056 A1	23-09-1985	NONE	

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